

## BIKE = VEHICLE

Under North Carolina law, your bicycle is considered a vehicle and you are its driver. You share the rights and the duties of the roadway network with all other drivers.

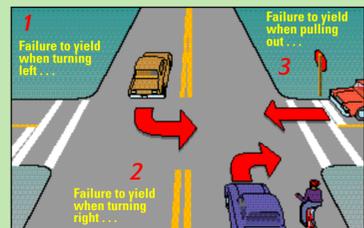
## Follow the Road Rules

-  **1. Ride on the right side of the road, going with the flow of traffic.**
-  **2. Obey all traffic controls — like stop signs, traffic lights, and one-way signs.**
-  **3. Signal whenever you intend to turn, merge to another road position, or stop.**
-  **4. Yield the right of way whenever you enter the road or when you change lanes or road position.**
-  **5. Use a good set of lights and reflectors whenever you ride after dark.**
-  **6. Don't ride your bike on sidewalks, and treat pedestrians with respect.**

### Watch for Motorist Errors

Drivers often do things that endanger bicyclists, usually without intending to. Knowing what to look for can help you navigate through traffic more safely. Ride predictably and in a visible location.

Keep your eyes open for the following mistakes and be ready to take evasive action!



- Watch motorists coming towards you who might turn left. Pay particular attention to their road position and, of course, any turn signals.
- Keep an eye on the motorist coming up on your left who might turn right. Listen for hints that the car might be slowing down.
- Watch for movement that could indicate a car is coming out of a driveway or side street.

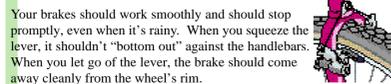
### Ride Defensively

Anticipate other people's moves — and their likely mistakes. Keep your eyes moving over the traffic scene, use a mirror, and be ready to take evasive action. Establish eye contact with drivers around you to let them know you are there. Shout if necessary.



### Use Good Equipment

You don't need an expensive bike to get around...just one that works and that can be repaired and adjusted. Nothing on your bike should be loose or rattle. To test if it's "road ready," pick it up a few inches off the ground and drop it to see if it makes any noise. Grease and oil the right spots to keep your bike running smoothly and reduce wear and tear.



Your "drive train" (cranks, pedals, shifters, chain, and gears) shouldn't creak, clunk, or hesitate. The chain shouldn't jump as it goes around. Shifting should be smooth and precise.

To ride at night, you need reliable lights and reflectors. You need a headlight that lets others see you and that lets you see hazards on the road. You need a rear reflector or taillight (both would be a good idea!). The new flashing halogen taillights are becoming quite popular. It's also a good idea to use pedal reflectors and some people like wheel reflectors. Being visible at night is essential.

### In short, keep your bike in good condition!

## BASIC RIDING SKILLS

### Starting Off

Share your leg over the frame, bring one pedal up to a 2 o'clock position, check traffic, and ride away.

### Scanning Behind

Look back over your shoulder before turning left or moving around a hazard. Even if you have a mirror, le to look over your shoulder in important situations.

Looking back over your shoulder does more than tell you what's there. It tells motorists that you want to do something (like merge left). Often, this simple act will slow down traffic so you can signal and merge across. Also discourages motorists who want to make a right turn from passing you dangerously close to the place you want to turn.

If you have trouble looking back while riding a straight line, practice riding down the stripes in an empty parking lot.

### Watching the Roadway

Keep your eyes constantly moving over the surface and traffic scene. When you see a hazard, look back and move around it when safe. The worst hazards go in the direction of travel or close to it. Cross diagonal railroad tracks at right angle. Avoid wheel-trapping drain grates.

### Using the Brakes

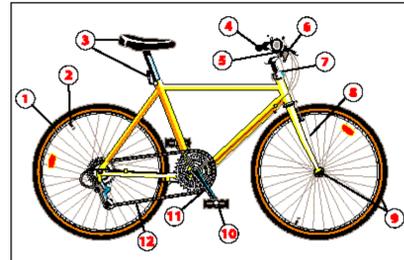
Use BOTH brakes smoothly and evenly. On downhill, use them lightly and often as you descend. Brake before you enter curves and let off as you go around. Keep your hands on the levers. In case of an emergency, you'll be ready.

### Riding in the Rain

In rain, your brakes won't work as well as on dry pavement. Allow more distance for stopping. Watch for slippery surfaces like crosswalks. Don't lean when you cross them or you could lose control. Straighten up until you're past and then turn.



## 13-POINT QUICK CHECK



- Push the tires against a curb. If you can flatten them, inflate to the pressure shown on the tire.
- Make sure valve stems point straight to the hubs to avoid rim cuts. Such cuts can't be patched.
- Twist and rock the saddle. It shouldn't move in any direction.
- Twist and rock the handlebars. They shouldn't move either.
- Squeeze the brakes. Levers should work smoothly and not hit the handlebars; brake pads should hit the rims squarely.
- Run through the gears while riding. They should shift smoothly onto all sprockets and not throw the chain.
- Rock the fork and handlebars forward and back and turn from side to side to check for loose or tight headset bearing. They shouldn't rock or bind.
- Squeeze pairs of spokes together. They should be tight and the wheels straight. Also look for broken spokes.
- Rock the rims from side to side. If there's play, the hub bearings are loose. Next, spin the wheels; they should roll smoothly. Also keep wheel axle nuts or quick-release levers tight.
- Rock the pedals front to back. They shouldn't move and should spin freely.
- Rock the crank arms from side to side. There should be NO play.
- Look closely at the chain. It shouldn't be either caked with grease and dirt or dry and rusty.
- Look for any loose nuts, bolts, and screws and tighten them up.

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## GREENWAYS



### What Are Greenways?

Greenways are a network of parks left in a natural state except for a system of trails for use by pedestrians and bicyclists. More than just recreation, greenways are quiet and enjoyable corridors to travel. They help control flooding and soil erosion, and preserve open space and wildlife habitats. Greenway types range from undeveloped corridors to formal pathways.

### Greenway Tips

While bicycling along greenway paths can be fun, remember that being away from traffic doesn't mean your worries are gone. Here are a few tips:

- Don't ride fast on trails.** Many trails are designed for low speeds, with tight curves and ambling pedestrians. If you want to ride fast, try the road instead.
- Pass pedestrians with care.** Never fly past a pedestrian. He or she might turn in front of you. As you approach, slow down, and calmly say, "Hi, I'm passing on your left."
- Watch for intersections.** Intersections are where most car/bike crashes happen. Intersections between trails and roads can be particularly tricky. Motorists may not notice bike traffic entering from a pathway. Slow down and yield or stop if necessary.
- Ride single file.** It's fun to ride next to a friend. But on narrow, crowded trails, riding two abreast is rude and forces others to get out of your way. Ride single file when the situation demands.

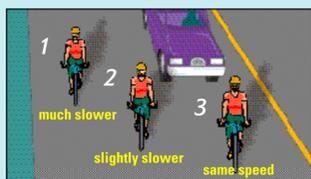
## BASIC TRAFFIC RIDING TECHNIQUES

Riding confidently and skillfully in traffic takes practice and an understanding of some basic ideas. One of the most important ideas is road position. Just where you ride on the roadway depends on several important things: your speed, the width and condition of the road, and your destination.

### Speed and Road Position

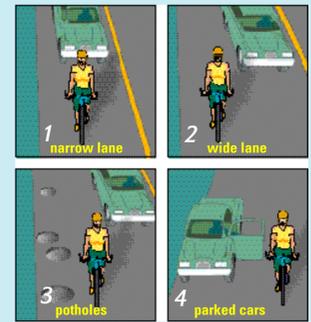
The closer you ride to the speed of traffic, the closer you should ride to that traffic.

- When everyone else is going a lot faster than you, keep well to the right.
- When they're going a little faster, ride near traffic. This encourages right turners to slow and wait instead of passing at the last moment and cutting you to turn.
- When they're going the same speed as you, ride in the line of traffic. This is your most visible position and ensures you'll be where drivers look for traffic.



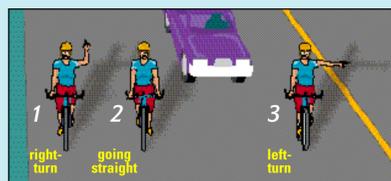
### Width and Road Position

- On a road with very narrow lanes, ride far enough from the edge to discourage dangerously close passing. Many expert riders ride in the car's right-wheel track.
- On a road with wide traffic lanes, ride just to the right of the traffic stream. This allows easy passing but reduces the danger caused by turning or crossing traffic.
- On a road with gravel, debris, or potholes on the right side, ride on the smooth pavement to the left of them.
- Always ride a good door's width from parked cars.



### Destination and Position

Near intersections, it's a good idea to let your road position tell others where you're going.



- To turn right, move towards the right edge of the roadway.
- To go straight, keep at least three feet from the curb and stay out of right-turn lanes.
- To turn left, ride about three feet right of the center line or, if there is one, use the left-turn lane.

### Making Left Turns

As you practice, you'll get better and better at merging in traffic until it becomes second nature. Making left turns is tricky but can be learned. Start on quiet streets and work up to busier ones.

- As you approach an intersection where you want to turn left, look back for a gap in traffic. If a car is coming, decide whether you can move left across the lane before it arrives.
- If you can cross before the car arrives, signal and merge across into a left-turn position near the center line or in a left-turn lane. If you can't cross before the car arrives, signal and watch the approaching driver. If he or she slows and waves you over, move left and wave "thanks." If the driver doesn't slow, let the car pass and try again with the next one.



- Once you've merged to a left-turn position, ride straight and watch what's going on around you.
- As you approach your turn, signal and watch for a break in oncoming traffic. After obeying traffic controls and yielding to crossing and oncoming traffic, make your turn.

### Left Turns on Fast Roads

On busy high-speed roads, it's very difficult to negotiate your way across traffic. In this case, it's a good idea to go straight across the intersection, stop at the curb and walk across when safe.

## NIGHTTIME RIDING TIPS AND EQUIPMENT

Almost 45% of all cycling deaths happen after dark. It's a risky time to ride...especially if you don't know what you're doing. Get the best lights you can afford. Stick to streets you know from riding during the day and ride slower. You'll know where the potholes and gravel patches are and be able to plan for them. Keep your hands on the brakes, your eyes on everyone and be ready to take evasive action!

### Taillight Tips

The best come with the rechargeable battery/halogen headlamps. Less expensive, battery-powered lights work OK with good rear reflectors. Generator taillights go out when the wheel stops, so be careful.

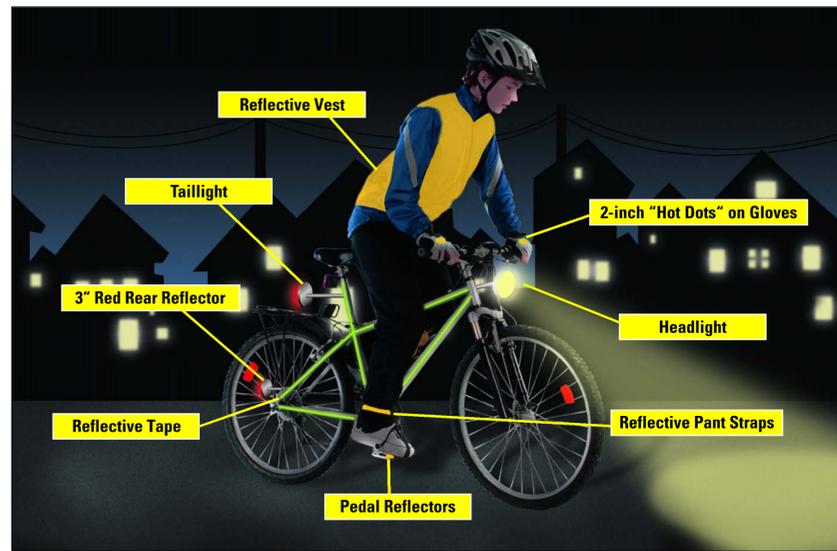
### Headlights

**Best:** Halogen lamp with rechargeable batteries. There are several models on the market. Ask your favorite bike shop for recommendations.

**OK:** Generator light with halogen bulb. Less expensive than rechargeable systems and they light the road well. Even without the halogen bulb, some generators are bright.

**Fair:** Cheap battery lights meet the law but don't light your way. Get one with D-cells.

**Tip:** If you ride in foul weather, get a battery light. Generators may slide on slick tires.



**REMEMBER: REFLECTORS ONLY WORK WHEN CLEAN AND POINTED IN THE RIGHT DIRECTION! CLEAN AND CHECK REFLECTORS REGULARLY AND REPLACE BROKEN ONES IMMEDIATELY.**

## WEAR A HELMET!

If you don't already have one, get a bicycle helmet today! If you have one, wear it every time you ride. Today's helmets look good, are very light, and let in those cooling breezes, all while protecting your head and brain! Helmets cost as little as \$15 and could be your most important piece of equipment.

### Why

In a word: protection. A good bike helmet can protect your brain. That's important if your head hits a hard surface...like a road, a curb, or a car. Children under 16 years old are required by law in Cary to wear a helmet.



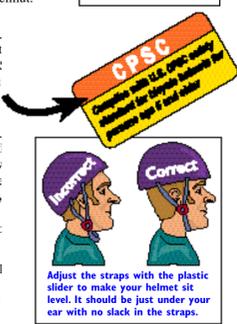
### What

Get one that fits snugly but tight. Make sure it has CPSC stickers, which prove that it passed specific tests.

### How

You should be able to see the front edge of your helmet v you look up. If your helmet tips back, it won't protect y forehead. Also, your neck strap should be snug but not too tight.

Make sure your helmet is the right size and doesn't rock from side to side. You can interior pads to fine tune a



## LOCAL BICYCLE SIGNS

### Bike-Route Signage

Most bicyclists know the best streets for bicycling in their own neighborhoods, but for some it can be intimidating to head into unknown territory on a bicycle. Check out the bike-route descriptions to the right to learn more about each route, its characteristics, and whether or not it's right for you.



### Bike Route

These Town of Cary bike-route signs will include a nameplate to notify bicyclists as to what route they are on.

### Cross Town Connector Routes

Mainly thoroughfares with high speeds and heavy traffic volumes.



### NC Route Indicator

1 = Carolina Connection  
2 = Mountains-to-the-Sea Route  
These are North Carolina state bicycle routes.

### Share the Road

Along portions of the routes which follow busy roads and where traffic is heavy, "Share the Road" signs have been erected. These warning signs remind motorists that bicyclists are using the roadway and, as legal vehicles, have a right to share the road.



## 8 COMMUTING TIPS



### How to Choose a Route

- Start on easy streets and hone your skills. As you gain confidence, try more demanding roads.
- The best route to work may (or may not) be the one you take while driving a car. Try different roads until you find a route you feel comfortable riding.
- Consider leaving home slightly early or slightly late; it may be possible to miss "rush hour" with a small adjustment in your schedule.

### How to Ride

- Ride lawfully. Auto commuters will get to know you over time and will come to respect you if you ride correctly.
- Don't assume that because you tour or race that you have all the skills and knowledge to commute. It takes a while to get comfortable riding in close quarters with heavy volumes of motor-vehicle traffic.

### How to Dress

- In cold weather, dress in relatively thin layers and peel them off one at a time as you warm up. Consider some of the new "high-tech" clothes used by cross-country skiers.
- In hot weather, bring a change of clothes (or keep one at work) so you don't go through the day sticking to everything.
- Carry heavy things on your bike in a rack pack, on a carrier, or in panniers rather than in a backpack, particularly in warm weather. You'll be more comfortable and your load will be more stable.

## BIKE-ROUTE DESCRIPTIONS

### LOCHMERE LOOP

This southeast Cary loop encircles two lakes and provides greenway access through Ritter Park. The even terrain and bicycle lanes along Lochmere Drive to the south make this portion of the route a good one for cyclists of all ability levels. Caution should be used when traveling along high volume thoroughfares in the north. These include Tryon Road, Southeast Cary Parkway and a crossing over Kildaire Farm Road.

### EDERLEE DRIVE SPUR

Located off Regency Parkway southwest of Lochmere Loop, this spur provides access to the Swift Creek greenway trail, Hemlock Bluffs Nature Preserve, and Symphony Lake Park. Suitable for cyclists of all ability levels, wide travel lanes lead cyclists through office parks and over areas of steep terrain. The greenway trailhead is unsigned and located on the east side of Ederlee Drive.

### TARBERT LOOP

Located on the western edge of the Three Lakes Loop, this shorter route traverses rolling hills along wide, residential streets. Ideal for cyclists of all ages and abilities, this route provides access to Annie L. Jones Park and three greenway intersections. Two greenways are located adjacent to Tarbert Drive, with the third greenway accessible by sidewalk at the intersection of Lake Pine Drive and Southwest Cary Parkway. Caution should be exercised when crossing Southwest Cary Parkway, a Cross Town Connector.

### WEST CARY ROUTE LINKS

(Suitable for cyclists of all abilities)  
**McArthur Drive** – Cyclists will find a striped bicycle lane and level residential terrain. A future greenway connection is planned for this route, eventually linking Bond Park to White Oak Park.

**Waldo Road Boulevard** – This is a high-traffic, signed bicycle route connecting Cary Parkway to NC Route #1.

**Legault Drive** – This signed bike route connects SW Cary Parkway to bike lanes in the north. Riders should be aware of frequent speed humps.

**Preston: Bridle Creek Parkway and Creek Park Drive** – These wide residential roads are level in terrain and striped with bicycle lanes.

**Crabtree Crossing Parkway** – This residential link is striped with bicycle lanes and serves as a northern spur from Route #3.

**Green Hope Trail** – This trail stretches from the Green Hope Elementary School Park on Louis Stephens Drive to Hogans Valley Way east of Davis Drive. It serves Green Hope High School, the Tennis Center, and Green Hope Elementary School. The trail is mainly residential in nature and has striped bicycle lanes along most of Uptech Meadow Road. Caution should be exercised when crossing Davis Drive.

### NORTHWOODS LOOP

Bordered on three sides by major thoroughfares, cyclists should exercise extreme caution when traveling this loop. This northeast Cary loop connects riders to the Black Creek Trail, Godbold Park and Cary's S&S Park. Cyclists heading north towards Unstead State Park will want to use the Black Creek trailhead located on NW Maynard Road, across from Godbold Park, Sudbury Drive, with its striped bike lanes and residential nature, makes a good north/south alternative to Harrison Avenue to access the West Ridge Trail and East Ridge Loop to the north.

### WEST RIDGE TRAIL

The West Ridge Trail runs west from the East Ridge Loop and provides access to the Black Creek Trail via connection points along Dynasty Drive. It serves Green Hope High School, the Tennis Center, and Green Hope Elementary School along signed bicycle routes. E. Dynasty Drive forms the southern boundary of the loop, providing riders potential access to the Black Creek Trail further west along the West Ridge Trail bicycle route.

### EAST RIDGE LOOP

This short northeast Cary loop is located at the eastern end of the West Ridge Trail. Wyatt's Pond Lane and Reedy Creek Road take riders past Reedy Creek Middle School along signed bicycle routes. E. Dynasty Drive forms the southern boundary of the loop, providing riders potential access to the Black Creek Trail further west along the West Ridge Trail bicycle route.

### PARK CENTRAL LOOP

This central Cary loop and its various spurs take you to five parks, two greenways, shopping centers, and dining areas. Characterized by wide streets and gently rolling terrain, it traverses through some of Cary's oldest neighborhoods. The Ellyn Drive spur accesses the Pirate's Cove Greenway. Please note a slight jog to the left from Ellyn Drive to Greenwood Circle when crossing SE Maynard Road. The greenway is located at the end of Greenwood Circle and is a natural surface trail most suitable for wider-tire bikes. Farmington Woods Drive has bike lanes and speed humps. Take Bissett Drive, then High Meadow Drive to connect to Three Lakes Loop and points south. Use caution along Wrenn Drive and Bargate – watch for backing cars from apartment parking areas.

### PARK CENTRAL TRAIL

Extending from NW Cary Parkway to Holtz Lane, this Cross Town Connector provides plenty of commuting and recreational riding opportunities. The Carousel/Madison Street segments are residential in nature, with wide streets and speed humps that provide automobile traffic "calming." Please use caution at a railroad crossing on North Dixon near Chatham Street. The West Park Street segment makes up the northern boundary of the Park Central Loop.

### THREE LAKES LOOP

This aptly named loop route is both challenging and serene. Catch glimpses of Kildaire Farms and MacGregor Downs Lakes and the Apex Reservoir as you ride a route that is almost entirely residential in nature, winding through wide, tree-lined streets. If you're seeking real exercise, south of Cary Parkway the terrain becomes moderately rolling with steep (but short) segments along Queensferry Road.

### MACGREGOR LOOP

This short loop can be combined with the Three Lakes Loop for a quiet and pleasant ride through one of Cary's best-known neighborhoods. There are a few short, steep hills and several golf-cart crossings. You'll enjoy some lovely views of the MacGregor Downs Lake as you traverse wide, tree-lined streets.

### NC BIKE ROUTE 1 (Davis Drive)

This route is part of the Carolina Connection, which NCDOT has designated as a portion of US Bike Route 1, which runs from Maine to Florida. Davis Drive is slated for improvements that include wide outside lanes and a parallel multipurpose path, which should make it ideal for bike commuting to Research Triangle Park. Until then, this route is recommended for experienced cyclists only.

### NC BIKE ROUTE 2 (High House Road from Davis Drive)

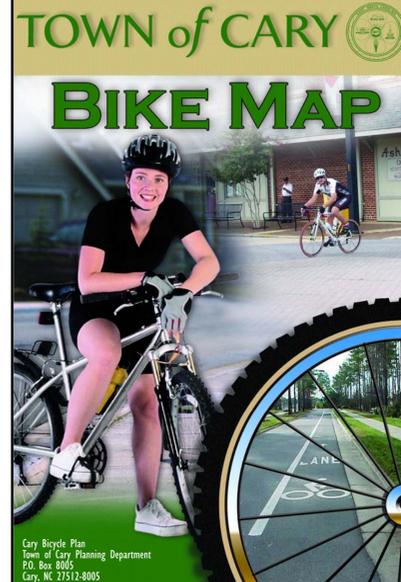
This is part of the Mountains-to-the-Sea Route, which extends 700 miles from Murphy to Manteo. Extending into rural western Wake and eastern Chatham County, this route is a favorite of Triangle cycle enthusiasts for recreational rides to Green Lake and Jordan Lake. Contact your local bicycle club about group rides in this area.

### CARY BIKE ROUTE #3

This Cross Town Connector runs along southwest and northwest Cary Parkway and serves as a connection between numerous bicycle loops. Portions of the route have 14'-wide outside lanes, while other segments are narrow with little or no shoulder. This route is recommended for experienced cyclists only.

### CARY BIKE ROUTE #7

Serving the eastern half of Cary, this Cross Town Connector runs along Harrison Avenue in the north forming the eastern edge of the West Ridge and Skate Loops. Further south, the route resumes on Kildaire Farm Road where it merges with the Lochmere Loop. Located on two major thoroughfares, this route is recommended for experienced cyclists only.



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## CARY'S BICYCLE PLAN

### Why does Cary have a Bicycle Plan?

Among the goals of Cary's Comprehensive Transportation Plan are to create a safe, convenient, and efficient multi-modal transportation system and to provide safe and convenient facilities and services for people who choose not to use an automobile. Bicycles are an essential component of a balanced, multi-modal transportation system.

### Why are bicycles important?

Bicycles are enormously popular: bicycling is the third most common recreational activity in America, behind walking and swimming. They're also earth friendly: The human-powered, non-polluting bicycle can be an efficient means of transport in an urban environment. Every trip made on a bicycle means one less car.

### What is a "bicycle facility"??

A bicycle facility is a structure that enhances accessibility, use, and convenience of bicycle transportation. There are two different types of bicycle facilities in Cary that characterize the Town's bicycle route system. These include striped bicycle lanes and wide outside lanes.

Noted bicycle transportation engineer Richard Moeur describes these "principles of good design" for bicycle facilities:

- Treat bicyclists as operators of vehicles
- Encourage operation in accordance with traffic flow and traffic law
- Connect destinations in a continuous network
- Accommodate cyclists without inconvenience or extra travel distance/time

While they most often refer to roads and road modifications, bicycle facilities can consist of other infrastructure improvements such as bicycle parking, bicycle-sensitive traffic signals, and compatible road markings.

### What exactly is a "striped bike lane"??

A bike lane is defined as "a portion of the roadway that has been designated by striping, signage, and pavement marking for the preferential or exclusive use of bicycles." Bike lanes are typically 4 feet wide.

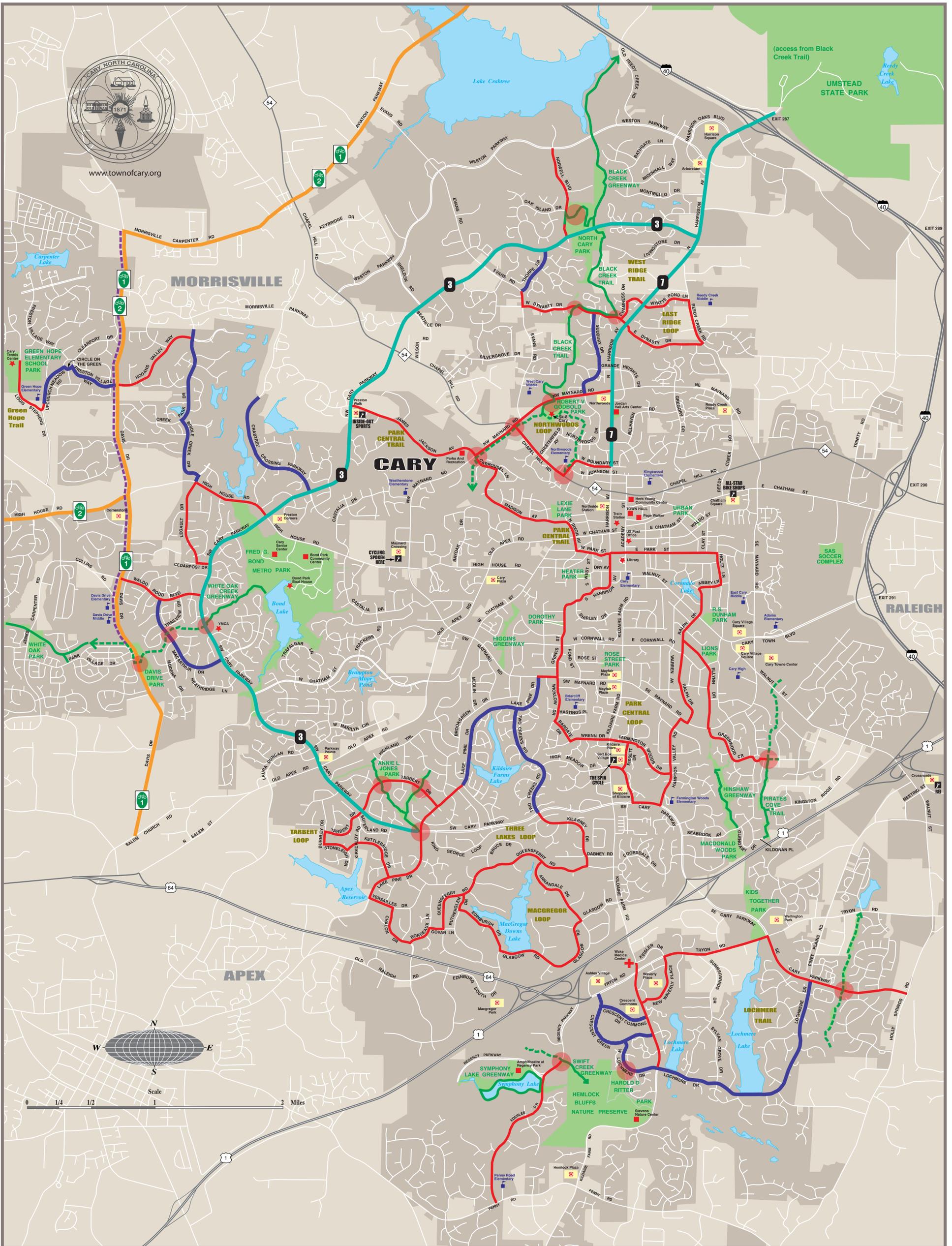
### How wide is a "wide outside lane"??

The NCDOT standard for a wide outside lane as a bicycle facility is 14 ft. The Town of Cary will apply this standard to all new thoroughfares. (For example, Northwest Cary Parkway from Evans Road to High House Road is a designated bicycle route with a 14-ft.-wide outside lane.) For existing thoroughfares, the Town will begin restriping outside lanes of multi-lane roads (at least two lanes in each direction) to create a 13 ft. outside lane and an 11 ft. inside lane. This will create additional width for bicycles.

### If I have questions or comments, whom do I contact?

You can visit the Cary Planning Department at 318 N. Academy Street, Building B, or visit the Bicycle Plan

# TOWN OF CARY BICYCLE ROUTES



www.townofcary.org

## LEGEND

- |                        |                                |                       |                          |                                   |                            |
|------------------------|--------------------------------|-----------------------|--------------------------|-----------------------------------|----------------------------|
| Interstate Highways    | NC Route Indicator             | Signed Route          | NC Bike Route            | Greenway/Bike Route Intersections | Bicycle Repair/Maintenance |
| United States Highways | Cross-Town Connector Indicator | Striped Bike Lane     | Greenway Stub            | Partial Cary Town Limits          | Wake Medical Center        |
| State Highways         |                                | Cross-Town Connectors | Proposed Multi-Use Trail | Parks/Nature Preserves            | Special Points of Interest |
|                        |                                |                       |                          | Lakes                             | Town Buildings             |
|                        |                                |                       |                          |                                   | Schools                    |
|                        |                                |                       |                          |                                   | Shopping Centers           |

Note: Map will be updated on a regular basis to reflect current conditions.